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ABSTRACT

The Perach Project is a one-to-one tutoring program for the socially disadvantaged. This study's main purpose was to locate Perach Project children two years after they had been tutored in order to determine their situation in school, measure their school self-concept, aspirations, and attitudes towards school, and examine their feelings about the project in retrospect. In order to determine Perach's role in their attitudes and school situation, comparisons have been made throughout this report to a control group that was similar to Project children with respect to background variables but who had not been tutored. Great difficulty is noted in locating many of the children, and it is speculated that those who were not located were most likely in either less academic frameworks or not studying at all. Results are thought to be promising, but it is noted that in any future study it would be extremely important to locate all of the children sought so that there are no doubts as to their place in the educational system. (MP)

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A FOLLOW-UP STUDY ON PERACH CHILDREN

TWO YEARS AFTER TUTORING

U.S. DEPARTMENT OF EDUCATION
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I. Introduction

The Perach Project is a one-to-one tutoring program in Israel in which university students help socially disadvantaged children. The children tend to come from Grades 5 to 9 and are recommended for participation in the project by their teachers and/or school counselors who feel they could benefit from such an activity. Tutors and children meet together twice a week in two-hour sessions over a seven-month period. Tutor training is minimal, however guidance and professional assistance are provided to tutors throughout the tutoring activity, mainly in the form of monthly tutor meetings, periodic newsletters distributed by the Central Perach Office and opportunity to meet with university professionals from the psychology, social work, and educational fields.

The major goals of Perach are to increase the motivation, achievement and self-confidence of a child whose home environment is unable to help, through the establishment of a close personal relationship between tutor and child. The emphasis of the project is academic, however in the broad sense of the word: tutors aim at improving the child's motivation and attitudes toward learning in addition to assisting him with his studies. Moreover, improved academic performance combined with a more positive self concept are expected to furnish the child with the desire and the tools required for remaining in school and for exercising his potential to the fullest.

On a short-term basis, the project's success in achieving these purposes has been limited as was seen from the results of an evaluation study carried out in 1977-79 (Eisenberg, Fresko & Carmeli, 1980). Findings indicated that tutored children did not appear to be progressing faster than non-tutored children with respect to their cognitive achievement as measured by standardized tests in the areas of reading comprehension, mathematics and English as a foreign language. However, the tutored children did exhibit greater satisfaction in school, felt themselves to be participating more in class and were reading more outside school than their non-tutored peers. Reports from parents, teachers and tutors tended to substantiate these findings.[1]

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[1] For a complete description of findings, sampling and data collection procedures, see Eisenberg, et.al., 1980.

Obviously, Perach aims to induce lasting changes in the children who participate in the project. From the start, participation was envisioned as a catalyst which would provide the necessary push forward to children who were in need of such help and who were not obtaining it from any other source. Thus, the true test of the tutoring activity can be discerned by examining its impact several years after the child has been assisted. Two possible types of long term effects may be examined: sustained effects and delayed effects.

Sustained effects may be considered those changes resulting from a project which immediately manifest themselves and are maintained several years after the children have left the project. In this context it would be interesting to know, for example, whether those children who had indeed made tangible gains in the areas of school achievement, self-concept and attitudes toward school while they had a Perach tutor, still revealed them two to three years later.

It should be noted that follow-up studies of other educational programs for disadvantaged children (not necessarily tutoring projects) have shown that in many instances a fade-out phenomenon existed, i.e., the immediate effects of the program tended to disappear with time (Goldberg, 1968; Adler et al., 1975). Nevertheless, a number of studies have discovered the persistence of effects one to two years after the program treatment was administered (Goodlad, 1979; Adler, 1975; Smilansky and Shfatia, 1972; Lombard, 1970). In one particular follow-up study of a tutoring project in the United States, improved verbal skills which had been observed as a result of tutoring were seen to have persisted in children after two years (Shaver & Nuhn, 1971).

In comparison to sustained effects, delayed effects may be considered changes in the child which only manifest themselves some time after his participation in a project has ceased. They may be thought of as changes elicited by program treatment which either remained dormant or did not lend themselves to proper measurement on a short-term basis. These changes may manifest themselves several years after participation has stopped, sometimes because the right situations present themselves causing them to be expressed or sometimes because other subsequent experiences of the child build upon the initial foundation laid by his activity in the project.

To illustrate an example of a delayed effect with respect to Perach, one might take the case of a tutor who has successfully demonstrated to his child the importance of staying in school and getting an education. On a short-term

basis this change in attitude is not directly observable; the child does not appear to do appreciably better in school or study harder. However, when he reaches the end of compulsory education (Grade 9 in Israel) and must decide whether to stay in school or not, he decides to remain. Obviously, influences other than Perach may have been at work here. However, if one compares Perach children to other similar children who did not have tutors and one finds that Perach children tend to stay in school longer, then one may conclude that Perach played a part in the decision to continue studying.

Delayed effects have been observed in a number of past follow-up studies. The most recent among them is a study which focused on the Perry Preschool Program in the United States. Results indicated that 11 years after participation in the pre-school project, teenagers exhibited lower rates of juvenile delinquency, higher high school completion rates, higher employment rates, and a lesser tendency to use welfare (Schweinhart & Weikart, 1980).

Purpose and Structure of the Report

Secondary education in Israel is highly specialized and differentiated. It represents an educational stage during which many important decisions are made by and for the child, decisions which are crucial in determining his later adult occupation and social status. Since nearly all Perach children are either in an elementary school or in a junior high school at the time they receive a tutor, it is of great importance to carry out a follow-up study to determine where they are, and what and how they are doing at the high school level. In addition to influencing whether a child chooses to remain in school after compulsory education age, Perach may have had an impact on the child's choice of high school, on his study track and even on his level of study at a later stage.

There exists some evidence that Perach has had both sustained and delayed effects on certain children. Letters received from former Perach children, as well as information obtained through informal means, have indicated that children have succeeded later on and, more importantly, have attributed their success to their former Perach tutors. This study is the first attempt to systematically determine the extent and nature of these effects.

In general, the main purpose of this study has been to locate Perach children two years after they had been tutored in order to determine their

situation in school, to measure their school self-concept, aspirations, and attitudes towards school, and to examine their feelings about their "Perach experience" in retrospect. In order to determine Perach's role in their attitudes and school situation, comparisons have been made throughout this report to a control group who were similar to the Perach children with respect to background variables but who had not been tutored.

The present report is structured in the following manner:

Chapter II, the next chapter, provides information about the secondary school system in Israel so that the foreign reader can comprehend the context in which this study was conducted;

Chapter III describes the measures and the sampling techniques employed in the study;

Chapter IV compares Perach and control children with respect to their location in the school system;

Chapter V compares Perach and control children with respect to aspirations, school self-concept, attitudes toward school and perception of popularity;

Chapter VI presents the Perach children's evaluation of their experience two years later;

Chapter VII summarizes and discusses the findings presented in the report.

Appendices appear at the end of the report which include: 1) the research instruments employed and 2) additional data which are referred to in the text.

II. Some Aspects of the Secondary School System in Israel

As mentioned earlier, secondary education in Israel represents one of the most important educational stages in a child's life. The school system itself is characterized by a high degree of specialization and differentiation; it is at this stage that a child either begins learning a trade or starts preparing for advanced academic or technical education at the post-secondary level. Compulsory education stops after Grade 9 and the continuation of schooling after this point entails numerous important decisions made for and by the child in accordance with his abilities, aspirations and interests.

The importance and complexity of the school system at the secondary level has had a direct bearing on both the content and procedures of the present study. The purpose of this section, therefore, is to acquaint the foreign reader with the main features of this system so that data presentation and discussion will be comprehensible. Three aspects will be described: 1) the dual school structure, 2) the high level of differentiation and 3) the matriculation examinations.

The Dual School Structure

Within the government-run, Hebrew-language schools (which comprise the vast majority of Perach schools), two school structures exist. The first one consists of an 8-year elementary school followed by a 4-year high school. While the elementary schools in this structure are neighborhood schools, the high schools are not. Children completing their elementary education must apply to a high school and be accepted on the basis of that school's criteria and space. This means that secondary school pupils often have to travel some distance, to another town or to another part of the city, in order to study.

The second and newer structure contains a 6-year elementary school, followed by a 3-year junior high school and a 3-year senior high school. The elementary schools, which are neighborhood schools, feed into designated junior high schools. The junior high schools are generally affiliated with senior high schools in that they often have the same school principal and are housed under one roof. Hence, although junior high school graduates do not

have to be accepted by the affiliated senior high school, in practice, most graduates of a particular junior high school tend to continue in the same school at the senior high school level (see Chen, et.al., 1977).[2]

In addition to the differences in the dispersion of children, the two school structures differ in other respects. Different study programs and instructional materials are used. Teachers in the "6,3,3" structure are required to have higher professional qualifications at the seventh and eighth grade levels than teachers in the "8,4" structure. While ability grouping occasionally exists as early as Grades 7 and 8 in the "8,4" structure, its existence in the elementary school depends on decisions taken by the school staff. However, in the "6,3,3" system, ability grouping in key school subjects in Grades 7, 8 and 9 is an integral part of the study program in all junior high schools (Chen, et.al., 1977).

The official Ministry of Education policy has been a gradual change toward the second school structure and hence at present in many towns and cities both structures exist side by side. Perach children attend schools in both systems. Because of the great differences with respect to study programs and decision-making periods, sampling for any follow-up study had to take the two structures into account.

Diffentiation and Specialization

After Grade 9, i.e., compulsory education, schooling in Israel becomes more and more specialized and the number of educational frameworks greatly increases.

First of all, there exists a great variety of high schools: academic, technical, commercial, agricultural, military and comprehensive. In addition to the regular day schools, boarding schools of various types are in abundance, many of which cater to a large proportion of the disadvantaged student population.[3]

Furthermore, within each type of high school there are various tracks which can be followed and which, once decided upon, are rarely subject to change. For example, in an academic high school one may concentrate on the physical sciences, social sciences, biology or humanities. In a technical high school

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[2]The first structure will be referred to as the "8,4" structure, while the second one will be the "6,3,3" structure.

[3]Approximately 30% of all high school students in Israel are in boarding schools (Ronen, 1981). In Israel, boarding schools tend to be neither exclusive nor

a broad range of programs may be pursued including electronics, auto mechanics and metal work.

In addition, a youth who is not found in a regular high school is not necessarily employed or seeking a job, but may be attending one of a number of courses or apprenticeship workshops available to him.

The Matriculation Examinations

When a student completes his secondary education he is awarded either a regular diploma which certifies his graduation from high school or a matriculation certificate which signifies that he has not simply finished his required stay in school but has also successfully passed a specified number of matriculation examinations given by the Ministry of Education. A matriculation certificate is a key to higher learning in Israel. Without it, acceptance at a university or college is not possible, although having it does not mean automatic acceptance since other factors enter in as well (e.g., grades on the matriculation tests, school grades, and university entrance test scores).

Traditionally, these matriculation tests were taken by those students who were studying in a college-preparatory curriculum. If someone who had not taken the tests decided later in life that he wished to study at a university, he could prepare himself and take them by attending certain private schools which existed for this purpose.

In order to make the school system more flexible and open, there has been a move in the direction of offering high school students in vocational tracks the option of taking all or some of the examinations. Thus, in addition to learning a vocation, many students opt to take courses in preparation for matriculation.

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academic. In fact, most are occupational in orientation, being run under the auspices of the Ministry of Education.

III. Methodological Approach

The basic design of this study was to locate Perach children two years after their participation in the project, to discern what their school situation and attitudes were at this time, and to compare them to a comparable control group. Described below are the sampling methods and measures used and the steps taken to locate the study samples.

Sampling Procedures

The children who had constituted the Perach group (n = 466) and the control group (n = 334) during the 1977-78 school year as part of the two-year evaluation served as a sampling pool for the present follow-up study. Carrying out a follow-up on all 800 children would have proven to be very time-consuming and in the search for delayed effects not relevant with respect to certain sub-groups. Hence, two considerations were taken which yielded a reduced sample size. First of all, children were selected from schools which had been attended by a sizeable number of both Perach and control children from the 1977-78 study, a step which vastly reduced the geographical areas which needed to be covered for a follow-up. Secondly, only those children were chosen from these schools who had passed a critical stage in their schooling since the time of the earlier study (for example, had entered high school).

In Table 1, one can see in which grades and at which stages of schooling the children from the follow-up sample were during the 1979-80 school year. As can be seen, Perach and control children from the 1977-78 study were sought who were at the time of the follow-up in Grades 9-11 in the "8,4" structure and in Grades 7, 8, 10, 11 in the "6,3,3" structure. In the end, a group of 420 children were looked for (251 in the Perach group and 169 in the control group).[4]

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[4]The control group sought originally numbered 183. It was discovered, however, that 14 control children had participated in Perach since 1977-78 school year. These children were eliminated from the sample, making the final figure 169.

Table 1: Situation in School of Follow-up Sample

Grade level 1977/78	Grade level 1979/80	Stage by School Structure "8,4"	"6,3,3"
5	7		1st year junior high school; 1st year of ability grouping
6	8		2nd year junior high school
7	9	1st year high school	
8	10	1st year non-compulsory education; 2nd year high school	1st year senior high school; non-compulsory education
9	11	2nd year non-compulsory education; 3rd year high school	2nd year high school; non-compulsory education

Location of Samples

Finding the children in the samples proved to be a complicated task. Home addresses of these children were not on file in the Perach office, meaning that a search had to be directed through the school system. In general, records in Israel are kept on school children at the national level for high school children, and at the local level for elementary and junior high school children. These records were often found to be both incomplete and inaccurate. Many cases were encountered in which a child appeared in the official records as attending a particular school but when the school was approached, it was discovered that the child was not there.

Children who were in Grades 7 or 8 were first looked for by contacting their local junior high school, i.e. the one they should have gone to on the basis of the elementary school they had attended. For those children who were not found at these schools, a search was made for their whereabouts through their previous elementary school or through the local education office.

Children in Grades 9, 10 and 11 were first sought among the national records kept at the Ministry of Education in Jerusalem. Two visits were made to the Ministry, one in February 1980 and a second one in February 1981 to check on new and updated information. When necessary, previous schools were contacted for information and local education offices were visited.

Whenever possible, children's home addresses were obtained and an attempt was made to directly contact the children themselves in order to locate them in the school system. It should be emphasized that once a child was located on a list or on any records, the school he was supposed to be attending was contacted in order to determine whether indeed he was a student there. Only when the school confirmed his presence was he considered as having been located.

In all, 324 children (77%) were located, 199 from the experimental group (79%) and 125 from the control group (74%). The distribution of those found by research group and by grade level is presented in Table 2. It can be seen that slightly fewer children were found on the whole for the upper grades. This situation was expected and apparently derives in part from the diversity of possible schools at these levels and also in part because of the greater chance of a child not being in any educational framework at all.

Table 2: Percentage of Children Who Were Located, By Research Sample and Grade Level

Grade	Perach			Control		
	Found	Not Found	(n)	Found	Not Found	(n)
7	81	19	(31)	82	18	(11)
8	80	20	(51)	74	26	(23)
9	84	16	(51)	77	23	(35)
10	77	23	(64)	74	26	(51)
11	76	24	(54)	69	31	(49)
Total	79	21	(251)	74	26	(169)

The fact that a child was not found,however, does not mean that he was not studying. It is possible that 1) he moved away and was living in a different area of the country, 2) that he was attending a boarding school or 3) if he was in high school, he simply applied to more than one school and at the last minute decided to go elsewhere. The only certain conclusion that can be drawn is that these children were not where they should have been.

Measures

Information concerning Perach and control children was obtained both from the schools in which they were studying and from the children themselves. School records were examined for the following data: 1) verification of whether the child was indeed attending the school; 2) what the child was studying (type of curriculum); 3) whether the child could take the matriculation examinations; 4) at which ability level he or she was studying Hebrew, mathematics and English and 5) what his or her grades were (see Appendix A1 for a sample form which was filled out for each child). Unfortunately, information about ability levels and grades was very incomplete, rendering it meaningless to make any comparisons on these variables.

A short personal questionnaire was sent at the close of the 1979-80 school year to each child whose home address had been obtained (i.e. to each child who had been located in a school and to a number of others whose home addresses had been obtained from the children's previous schools). This questionnaire focused on the child's future educational and occupational goals, school self-concept, attitudes toward school and satisfaction in school. In addition, previous Perach participants were asked a number of questions concerning their evaluation of their Perach experience in retrospect (see Appendix A2 for a sample questionnaire).

Out of 324 questionnaires which were sent, only 167 were returned (51.5%), despite the fact that reminders were mailed a month later to those who had not responded. As can be seen from Table 3, the children who were in high school (Grades 9, 10 and 11) tended to return the questionnaire considerably less than those children in Grades 7 and 8 in the junior high schools.

It was felt that because of the low return rate, the representativeness of the results from this questionnaire could be questioned. Consequently, a comparison

Table 3: Percentage of Children Who Returned Questionnaire, By Research Sample and Grade Level

Grade	Perach			Control		
	Returned	Not Returned	(n)	Returned	Not Returned	(n)
	62	38	(24)	89	11	(9)
8	64	36	(42)	69	31	(16)
9	44	56	(43)	44	56	(27)
10	47	53	(49)	47	53	(38)
11	46	54	(41)	44	56	(34)
Total	52	48	(199)	52	48	(124)

was made between those children who had returned the questionnaire to those who had not with respect to research group, sex and socioeconomic status.[5] No differences were discovered in the return rate by any of these variables (see Appendices B1 & B2). Since those who had returned the questionnaire were similar to those who had not with respect to these variables, it was decided to assume that results from the questionnaire were representative of the entire sample.

Comparison of Experimental and Control Groups

In order to determine whether Perach and control children who had been located were similar to each other, comparisons were made with respect to sex and family socieconomic status (see Table 4). It was found that the sex distributions for both groups were highly similar, however, the control children tended to come from families of high socioecomonic status. Dividing the groups into grade levels, it was seen that the sex ratio was the same for both groups within each grade, however, the control group tended to be from families of significantly higher socioeconomic status in Grades 8, 9 and 11 (see Appendices B3 & B4). As a result, comparisons of the experiemtnal and control groups for this report have taken into account, where appropriate, the socioeconomic differences between the two groups.

[5] Socioeconomic status was determined for each child on the basis of the parents' ethnic background, the father's occupation and family size. A composite score was constructed for each child from these three variables. Scores were then grouped into four levels and are referred to in this report as Level I, Level II, Level III and Level IV. It should be pointed out that the highest level(Level IV) among these children is only equivalent to a middle to lower-middle class level in the entire Israeli population, while the lowest level is quite low by all standards (e.g. father unemployed and eight or more children in the family).

Table 4: Distribution of Follow-Up Samples (Children who were Located) By Research Group, Sex, Socioeconomic Status and Grade Level (%)

	Perach	Control
Sex		
Boys	50	46
Girls	50	54
(n)	(199)	(124)
	(χ^2 = .47, df = 1, n.s.)	
Socioeconomic Status		
Level I (lowest)	17	5
Level II	38	32
Level III	39	52
Level IV	7	11
(n)	(166)	(100)
	(χ^2 = 11.22, df = 3, p = .01)	
Grade Level		
7	12	7
8	21	13
9	22	22
10	25	31
11	21	27
(n)	(199)	(124)
	(χ^2 = 7.29, df = 4, p = .10)	

IV. Location within the School System

The focus of this section is the location of the Perach and non-Perach children in the school system. Data are presented by grade level since the child's particular educational stage is a prime factor in determining his place in school. Comparisons have been made between the two research groups on such variables as likelihood of being located, type of school in which they are studying and their curricula. Comparisons could not be made concerning ability grouping or grades because of a serious problem of incomplete data.

Likelihood of Being Found

As noted in the last chapter, there was a slight, though not statistically significant, difference between Perach and non-Perach children with respect to their having been located by the researchers, despite equal efforts exerted in looking for them. This difference existed at all grade levels except Grade 7.

If those who were found are compared to those who were not found regarding socioeconomic background and sex, an interesting picture emerges. First of all, looking at Table 5, one finds a strong relationship between socioeconomic status and having been found among non-Perach children. As socioeconomic status rises, there is a greater likelihood that a child had been located. This relationship does not exist for the Perach group, in which children of low socioeconomic status and children of higher socioeconomic status were just as likely to have been found.

From Table 5, one sees that in both groups girls tended to have been found more often than boys. This difference, however, was greater for the non-Perach group and also statistically significant for this group.

Briefly, children from the lowest socioeconomic backgrounds and boys tended not to be found among the non-Perach children, whereas no relationship existed between being found and either sex or socioeconomic status among the Perach children.

The significance of not being found is not at all easy to establish. With respect to those children in Grades 7 and 8 in the junior high school, it seems that for the most part children were not located when their elementary school fed into a junior high school which was adjoined by an academic senior high school

Table 5: Percentage of Children Found, By Research Sample and Socioeconomic Status and Sex

	Perach			Control		
	Found	Not Found	(n)	Found	Not Found	(n)
Socioeconomic Status						
Level I (lowest)	74	26	(38)	56	44	(9)
Level II	76	24	(83)	60	40	(53)
Level III	82	18	(78)	79	21	(66)
Level IV	86	15	(13)	100	-	(11)
	(χ^2=2.02, df=3, n.s.)			(χ^2=10.24, df=3, p=.02)		
Sex						
Boys	76	24	(131)	68	32	(84)
Girls	83	17	(121)	80	20	(84)
	(χ^2=1.85, df=1, n.s.)			(χ^2=3.08, df=1, p<.10)		

as opposed to either a comprehensive or occupational one. Although children were officially supposed to have continued to these junior high schools, apparently some way was found of transferring them to another school in which they had a greater chance of continuing on and succeeding at the senior high level.

Regarding the children in Grades 9, 10 and 11, one of the main reasons for not locating children was the proliferation of possibilities available to the children at the high school stage. Not only may they have been in any one of a number of regular educational settings but they also may have been attending any of various other educational institutions such as boarding schools, private day schools, job training courses, etc. Moreover, the compulsory education law does not pertain to Grades 10 and 11, hence some of these children may not have been studying at all.

It seems that locating a child in this study means that the child was where he was "supposed to be" according to official sources, while not finding him means that he had probably taken a less conventional path (except perhaps in the cases in which the family had relocated). Thus, the fact that Perach children were more often "where they should be" than non-Perach children is a significant finding. Even more important is the fact that among the Perach children low socioeconomic groups and boys tended to remain in the conventional educational setting, while among non-Perach children this was not the case.

Type of School

As mentioned earlier, there exists in Israel a wide variety of high schools. Children are not accepted automatically to a high school, but must apply and then be accepted according to the school's criteria. Looking at Table 6, we can see that overall the vast majority of children at the high school level (Grades 9,10 and 11) in this study were attending either comprehensive or occupational schools. Very few were found in academic (college preparatory) high schools or boarding schools and likewise very few were not studying. This distribution is not surprising if one considers that few disadvantaged children get to the academic schools. Also it is likely that those children who were not found were those who were not in a formal educational setting or who were not studying at all. No difference was found between Perach and non-Perach children on type of school by grade level or socioeconomic status (Appendices B5 & B6).

Table 6: Distribution in Percentages of Children By Research Sample and Type of High School (Grades 9, 10, and 11)

Type of High School	Perach	Control
Academic	4	7
Comprehensive	31	31
Occupational	48	42
Boarding	7	3
Other	4	5
Not in school	4	10
(n)	(134)	(96)

(χ^2 = 5.08, df = 5, n.s.)

Type of Curriculum

The wide range of occupational streams in the Israeli high schools offers a multitude of curricular choices to the student. Comparisons were made between Perach and non-Perach children in Grades 10 and 11 regarding type of curriculum. The comparisons were made separately for girls and boys. As seen in Tables 7 and 8, no significant differences were noted. The boys in both groups tended to enroll in electronics, general and auto mechanics and electricity, while the girls tended towards secretarial and office skills. Only 11 children, overall, were enrolled in academic-oriented curricula.

Level of Curriculum

Occupational streams may be ranked according to level of studies. In most high schools there exist three levels: practical, regular and theoretical. The practical level may be considered the lowest level academically speaking. Studies tend to focus mostly on job-training and require a minimum of academic courses. Moreover, the occupations taught at this level tend to demand the least amount of technical knowledge. Included here are hairdressing, sewing, carpentry and the like. The main difference between the other two levels, i.e. regular and theoretical, lies in the amount and intensity of the academic courses which are required. In both cases technically skilled occupations are taught, however those who study at the theoretical level generally have the option of preparing for the matriculation examinations which are taken by those in the academic streams.

The various curricular fields of the children in this study were arranged according to these levels[6] and comparisons were made between Perach and non-Perach children. As seen in Table 9, no differences were found between the two groups. Controlling for sex and socieconomic status also yielded no differences between groups (Appendices B7 & B8).

Matriculation Examinations

Whether it is possible for a student to take the high school matriculation examinations is related in part to what he is studying (his curricula) but mainly

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[6]Curricular fields were arranged according to levels either based on precise information from the schools or as a result of consensus as to ranking made by a panel of five judges.

to the level of his studies.

Looking at Table 10, one finds no significant differences between Perach children and non-Perach children on whether they could take the matriculation examinations, both before and after controlling for socioeconomic status. (Since being able to take these examinations does not necessarily mean that the student will indeed take some or all of them, it would be interesting to look at these children in another three years to discover who actually did matriculate.)

Summary

To sum up the findings in this section, we find that Perach children were found more often than non-Perach children, and that this was particularly true regarding the boys and the lower socioeconomic groups. With respect to type of school, type and level of curricula and possibility of taking matriculation examinations, no differences were found between the groups.

Table 7: Distribution in Percentages of Perach and Control Boys By High School Curriculum (Grades 10 and 11)

Curriculum	Perach		Control	
	%	(n)	%	(n)
Electronics	19	(7)	11	(2)
General Mechanics	14	(5)	16	(3)
Auto Mechanics	19	(7)	26	(5)
Electricity	16	(6)	5	(1)
Office Work	14	(5)	11	(2)
Apprenticeship	--	--	11	(2)
Academic	11	(4)	11	(2)
Other *	8	(3)	11	(2)
Total	101	(37)	102	(19)

($\chi^2 = 5.88$, df = 7, n.s.)

*Curricula mentioned by only one child.

Table 8: Distribution in Percentages of Perach and Control Girls By High School Curriculum (Grades 10 and 11)

Curriculum	Perach		Control	
	%	(n)	%	(n)
Office Work (secretarial, clerical, bookeeping)	43	(15)	50	(15)
Drafting, graphics	11	(4)	--	-
Pedagogic	9	(3)	3	(1)
Academic	6	(2)	10	(3)
Other *	32	(11)	36	(11)
Total	101	(35)	99	(30)

(χ^2 = 4.59, df = 4, n.s.)

*Curricula mentioned by only one child.

Table 9: Distribution in Percentages of Perach and Control Children By Level of Curriculum (Grades 10 and 11)

Curriculum Level	Perach		Control	
	%	(n)	%	(n)
Practical	6	(5)	12	(7)
Regular	50	(40)	47	(27)
Theoretical	35	(28)	30	(17)
Academic	9	(9)	11	(6)
Total	100	(80)	100	(57)

($\chi^2 = 1.67$, df = 3, n.s.)

Table 10: Percentage of Children Able to Take Matriculation Examinations By Research Group and Socioeconomic Status (Grades 10 and 11)

Socioeconomic Status	Perach			Control		
	yes	no	(n)	yes	no	(n)
Level I (lowest)	67	33	(15)	50	50	(2)
Level II	54	46	(28)	47	53	(17)
Level III	71	29	(34)	70	30	(27)
Level IV	61	39	(18)	67	33	(24)
Total	63	37	(95)	63	37	(70)

V. An Exploration of the Affective Dimension

The focus of this chapter is the affective dimension. The data here were obtained from the personal questionnaire which was sent to each child whose address could be obtained. As mentioned earlier, the return rate for this questionnaire was relatively low, however no differences were found between those who answered and those who did not answer with respect to sex, socioeconomic status or research group. Thus, the assumption is made that the data here are representative of the entire research group.

The main areas which were examined were the following: 1) school and occupational aspirations, 2) school self-concept, 3) satisfaction in school and 4) perceived popularity. Each subject is treated separately below.

Aspirations

A number of questions were asked concerning the child's aspirations regarding matriculation examinations, future occupation and continued education. These questions had appeared on the personal questionnaire in the pre-test/post-test paradigm during the 1977-78 school year. These questions were combined to form an aspiration index and the pre-post and follow-up scores were compared. Looking at Table 11 and Appendices B9 & B10, one can see that overall and in Grades 9 and 10, there was a significant difference between Perach and control children on follow-up scores although pre- and post- scores had not differed. Moreover, these differences remained significant when controlling for pre-test aspiration scores and socio-economic status.

On the fourth question, which did not enter into the index, (i.e. whether they plan to continue studying after high school) once again there was a significant difference between Perach and control groups across grades and socioeconomic groups. (See Table 12 and Appendices B11 and B12.) Perach children tended to be more definitive about continuing their education than were the control children.

According to all indications the Perach group was manifesting higher aspirations than the non-Perach group two years after the former's participation in the Perach project.

School Self-Concept

Five items in the follow-up questionnaire devoted to the topic of school self-concept had appeared in the previous questionnaires used in the pre-test/post-test study. Comparing the pre-, post-, and follow-up scores in Table 11 and Appendices B9 & B10, one sees that there are no statistical differences between Perach and non-Perach children in this area whether overall, by grade, or controlling for pre-test scores and socioeconomic status.

When asked in which subject they succeeded most in school, statistically significant differences were found among Perach and control children in Grades 10 and 11 (i.e. those children already in a study track). Perach children tended to mention academic subjects as opposed to occupational or other non-academic subjects more often than non-Perach children (88% vs. 67%). When examining boys and girls separately, a statistical difference was found for the girls while no significant difference was found for the boys though the basic trend remained (see Tables 14 & 15).

Attitudes Toward School

Attitudes toward school were examined, first of all, from the viewpoint of the children's satisfaction in school and, secondly, with respect to their own reports of how often they prepared their homework and how frequently they participated in class. (See Tables 13 & 14 and Appendices B9, B10 & B13.)

Concerning satisfaction with their progress in school, Perach children in the ninth grade tended to be more satisfied than non-Perach children in the same grade. Otherwise, no significant differences between the groups were detected.

Children in Grades 10 and 11 were asked whether they were satisfied with their particular curriculum. On the whole, most children were satisfied and no differences were discovered between Perach and non-Perach children.

With respect to reports of classroom participation, no differences were found between the groups. However, as to reports of doing homework, it was found that Perach girls reported doing homework more often then non-Perach girls (χ^2=6.01,p .05). The difference was not significant for the boys in the sample, however the direction remained the same, i.e. Perach boys reported doing homework more often than non-Perach boys.

Perception of Popularity

In the two year pre-test/post-test study, it had been found that children who had dropped out of the project early in the school year tended to rate themselves as more popular as compared to Perach children. Looking at the Perach and non-Perach children in the follow-up study, one finds no differences between Perach and non-Perach children in how they tend to rate their popularity among their peers. (Table 11.) Moreover, no differences were found by grade level or when controlling for socioeconomic status (Appendices B9 & B10).

Summary

In summing up the findings in the affective domain, it seems that Perach children tended to have higher aspirations, to feel most successful in academic school subjects, and to report doing homework more than non-Perach children. No differences were detected between the groups on a school self-concept scale, on satisfaction in school, reports of classroom participation and self-rated popularity.

Table 11: Pre, Post and Follow-up Scores for Perach and Control Children on Aspirations, School Self-Concept and Popularity Variables

($\bar{X}$)
(s.d.)
(n)

	Pre	Post	Follow-up
Aspirations Index			
Perach	10.21	10.17	9.64*
	2.16	2.30	2.88
	(47)		
Control	9.71	10.36	8.00
	2.43	2.11	2.82
	(28)		
School Self-Concept Index			
Perach	18.46	18.78	17.71
	3.31	3.23	3.61
	(63)		
Control	18.42	18.50	17.58
	3.23	2.71	2.89
	(38)		
Feeling of Popularity**			
Perach	3.09	2.98	3.14
	1.37	1.28	1.12
	(86)		
Control	2.86	2.95	3.02
	1.34	1.41	1.17
	(44)		

* Significant difference between Perach and Control, p = .02, using t-test.

** Inverse scale, i.e. low score means feeling of being well-liked.

Table 12: Distribution in Percentages of Perach and Control Children By Plans for Continued Study

	Perach	Control
Plan to study after high school		
Yes	55	34
Maybe	40	57
No	5	9
(n)	(108)	(65)

($\chi^2 = 8.37$, df = 2, $p < .02$)

Table 13: Distribution in Percentages For Perach and Control Children On "Attitude Toward School" Variables

	Perach	Control
Satisfied With School Progress		
Very Much	26	25
Fairly Satisfied	56	53
Not Satisfied	15	20
Very Unsatisfied	3	2
(n)	(103)	(64)
Classroom Participation		
Very Often	27	29
Often	54	48
Rarely	17	23
Not At All	1	--
(n)	(108)	(65)
Homework		
Always	53	42
Usually	40	47
Sometimes,Rarely	6	9
Never	1	2
(n)	(108)	(64)

Table 14: Distribution in Percentages for Perach and Control Children on "Attitude Toward School" Variables (Grades 10 and 11)

	Perach	Control
Satisfied with curriculum		
Yes	86	86
No	14	14
(n)	(35)	(34)
In which subject do you most succeed in school?		
Mentioned academic subject	88	67
Mentioned non-academic or occupational subject	12	33
(n)	(43)	(33)

($\chi^2 = 5.16$, df = 1, $p < .02$)

Table 15: Distribution in Percentages By Sex of School Subject in Which Child Most Succeeds (Grades 10 and 11 only) % (n)

	Boys		Girls	
	Perach	Control	Perach	Control
Academic subject mentioned	89 (16)	73 (11)	88 (22)	61 (11)
Non-academic or occupational subject mentioned	11 (2)	27 (4)	12 (3)	39 (7)
	(χ^2=1.33, df=1, n.s.)		(χ^2=4.24, df=1, p=.04)	

VI. The Children's Evaluation of Perach

A number of questions in the follow-up questionnaire were addressed only to those children who had participated in Perach in the past. The purpose of these items was to determine the children's evaluation of the project in retrospect. Below, the children's responses are presented and comparisons are made between their evaluations at the time of the follow-up and their evaluations while actively involved in the project.

Evaluation in Retrospect

In general, the children's evaluation of the project had been very high at the end of the tutoring activity. Looking at the distribution of responses in Table 16, one finds that, overall, the children's regard of the Perach tutor had remained very high two years later. Most of the children (79%) felt that their tutor had helped them more or as much as they had expected. Likewise, most children (79%) reported that the tutor had helped them do better in school. About 1/3 of the children felt that the tutor had helped them in "other areas" (generally with personal or social problems). This relatively low percentage is not at all surprising since, as was seen in an earlier report, the children had expected to be helped in school rather than with their personal problems (Eisenberg, et al., 1980, pp. 82-83).

When asked about their relationship with the tutor, about 60% of the children indicated that the tutor had been like a good friend to them. The others were evenly split in their descriptions, either responding that the tutor had been like a teacher to them or stating that he or she had been like an older sibling. A difference existed by grade level concerning the children's responses, with the younger children viewing their tutor more often as a teacher and the older children viewing him or her more often as an older sibling. (See Table 17.) The age difference between tutor and child is probably the major factor influencing this difference. In other words, it seems that the greater the age difference between the pair, the greater the likelihood that their relationship will be one of adult and child, and hence in this case, one of teacher and pupil.

The children's recollections concerning their Perach experience were shown to be positive in other ways. In general, they claimed that tutoring meetings had not interfered with, or only rarely interfered with their participation in other activities. No differences were found by grade level in contrast to earlier

indications that the older children went less willingly to meetings than the younger children (Eisenberg, pp. 74-75). In addition, they recalled that the reaction of their peers to the fact that they had a tutor had been either one of indifference (61%) or jealousy (33%) and rarely one of mockery (only 6%).

Finally, it is interesting to note that about half of the children claimed that they met with their tutors at least once after the official end of the tutoring activity. (There were no sex or grade differences.) If one considers that about 1/3 of the tutors completed their studies at the end of that year, often leaving the area, this figure is impressive.

Comparison of Follow-Up and Post Evaluations

In order to see to what extent the children's evaluations of Perach had changed over time, a comparison was made between their evaluations at the end of the tutoring experience, i.e. June 1978, and their evaluations two years hence. Three indices were composed for this purpose: 1) the extent to which the tutor had helped, measured at the end of the tutoring period; 2) the strength of the relationship between tutor and child, measured also at the end and 3) the child's evaluation of the tutor and his help measured two years later.

It seems that the children's reports remained fairly consistent over time. The child's evaluation at the time of the follow-up was correlated with his post-activity response, i.e. with both the child's evaluation of the tutor's help ($r=.23$, $n=74$, $p=.025$) and the strength of the tutor-child relationship ($r=.36$, $n=71$, $p=.001$), even after controlling for socioeconomic status, sex and grade level. In short, those children who, at the end of 6-7 months of tutoring, rated the assistance from the tutor highly and who had indicated that the relationship with the tutor was strong, still expressed very positive feelings two years later. The fact that their memories in general were quite positive and that they were not forgotten over time attests to the fact that Perach was indeed an emotionally positive experience for them.

Table 16: Distribution of Responses On Perach Evaluation Questions (n=118)

Question	Distribution
Looking back, how would you evaluate the tutor's help?	
Greater than expected	44%
About the same as expected	35%
Less than expected	21%
Do you feel that the tutor helped you do better in school?	
Yes	79%
No	21%
Did he assist you with other things too (e.g. personal problems)?	
Yes	37%
No	63%
How would you describe your relationship with the tutor?	
As with ...	
a teacher	19%
a good friend	61%
an older brother/sister	20%
Did the tutoring meetings keep you from other activities?	
Often	2%
A little	37%
Not at all	61%
How did your friends react to the fact that you had a tutor?	
Made fun of me	6%
Indifferent	61%
Were jealous	33%

Table 17: Distribution in Percentages By Grade Level of Children's Relationship With Tutor

	Grade				
Tutor was like a:	7	8	9	10	11
Teacher	43	28	16	8	-
Good Friend	48	62	37	88	61
Older Sibling	9	10	47	4	39
(n)	(21)	(29)	(19)	(26)	(23)

(χ^2 = 36.47, df = 8, p = .0000)

VII. Summary and Discussion

The purpose of this study has been to follow-up on Perach children two years after having been tutored. An attempt has been made to discover where the children were in the school system, how they felt about themselves academically and socially, what their future plans were, and how they felt about their Perach tutor in retrospect. The research group consisted of a sub-sample of those children who had been tutored during the 1977-78 school year, who had been included in the research sample for an earlier study, and who had passed a crossroads in their education since having been tutored. Data were collected in 1980 for the follow-up both through the schools and from a questionnaire filled out by the children themselves. Comparisons were made to a comparable control group who had been part of the control sample for the earlier study on Perach.

Summary of Findings

Examining the findings with respect to sustained and delayed effects, the following picture has emerged. Concerning sustained effects, it seems that Perach children, particularly the girls, have continued to report doing their homework more regularly than those in the control group. In addition, evaluation in retrospect of the tutoring experience has remained high among the Perach children. Any differences which existed between Perach and non-Perach children at the end of the tutoring activity with respect to self-reports of classroom participation and satisfaction in school have seemed to disappear after two years.

Regarding delayed effects, it appears that Perach children as compared to control children have begun exhibiting higher educational and occupational aspirations, mention more often doing best in school in academic as opposed to occupational or non-academic subjects, and tend more often to be found in the school system "where they are supposed to be". Differences were not found between tutored and non-tutored children with respect to type of high school, type or difficulty of curriculum, and whether they would be able to take high school matriculation examinations. In addition, no differences emerged concerning school self-concept and perceptions of popularity.

Interpretation of Findings

Overall, these findings reflect positively on the Perach Project. Whenever statistically significant differences were discerned between Perach and control children on the various measures, Perach children tended to be exhibiting the more desirable behavior.

In an earlier study (see Eisenberg et al., 1980) it was seen that the immediate impact of the tutoring was to alter the child's attitudes towards school: he felt better in school, exhibited better study habits and sometimes was performing better as well. With the passage of time and as a result of the tutor no longer being on the scene to offer assistance with daily school difficulties, manifestations of the tutor's effect seem to have shifted. This study has shown that two years following participation in Perach, tutored and non-tutored children could be differentiated from each other more on value-related matters than in behavioral terms. In other words, whatever differences existed at the time of tutoring between the two groups in classroom behavior, etc. seem to have vanished and in their stead have appeared differences in the emphasis placed on academic success. The Perach child seems to attach greater importance to success in school; he wants to do well and continue on. Even the fact that he reports doing best in academic school subjects (although indications show no real difference between Perach and control children) indicates that he has internalized the value which modern society puts on academic achievement.

The fact that two years after tutoring Perach children do not appear to differ from non-Perach children with respect to their situation in school is disappointing. It is possible, however, that Perach children did indeed make greater strides in school or in other important areas but that the scope of this study did not enable their detection. It is also possible that although no differences were found at this point in time, at some future date Perach children will be found to have translated their apparently higher goals into visible achievements. For example, perhaps later it will be seen that Perach children tend more often to finish high school with a matriculation certificate, occupy more important positions in the army, and/or continue more often on to post-secondary education.

Similarly, it is also possible that Perach children will be unable to realize their aims, a situation which may lead to frustration and bitterness. Assuming that the Perach tutor is successful in helping and motivating a disadvantaged child on the

short-term, one must remember that the child remains in his environment long after the tutor has come and gone. The negative influences of the child's surroundings continue to operate so that eventually the impact of the tutoring may be considerably weakened. Thus, it is possible that essentially what remains from the tutoring experience for the child is the desire to get ahead,without the proper tools (i.e. adequate cognitive development, study habits, etc.) to do so.

Given these various possibilities it would seem that the continuation of a follow-up investigation is extremely important. Samples of previous Perach and control children should be examined periodically to determine the situation of each in school as well as whether later they complete high school, serve in the army, and continue their education. If it is discovered that the tutoring has only raised goals without changing behavioral patterns then one must conclude that Perach as it operates today is not enough.

The question must then be asked what Perach can do to prevent such circumstances or at least to increase the probability that such a situation will not occur. One solution could be to extend the tutoring period from the usual single school year to two years. Lengthening tutoring time could be expected to increase the tutoring effect, particularly in the cognitive realm[7], and increase the chances that negative environmental influences will be successfully counteracted. (It should be noted that while this report is being written, Perach is experimenting with increasing tutoring time to two years. The results of this attempt will be known at the end of 1982.)

Another possibility would necessitate greater attention being paid to the selection of children to the project. Observations and data indicate that although children with severe emotional and behavioral problems do not get in to Perach, Perach children are nonetheless a fairly heterogeneous lot. They vary greatly with respect to potential, achievement, willingness to exert an effort, popularity among classmates, family situation, etc. Very often children are recommended and accepted for participation more out of pity than as a result of a rational decision that tutoring could provide a reasonable source of help for their problems. It would seem, that if Perach aspires to helping and motivating disadvantaged children, it is <u>extremely</u> important to select children who indeed have potential and whose objective situation (social, emotional, etc.) would not severely frustrate the tutor's efforts. The importance of proper selection of children must be made clear both to teachers and school counselors who recommend the

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[7]See Carroll, 1963; Cloward, 1967; Lewy and Chen, 1974 and Keeves, 1976 for evidence of the effect of time and intensity of learning on achievement.

children and to Perach coordinators who make the final decision concerning who is accepted.

Yet still another possible change would entail clarifying Perach's actual goals and, subsequently, giving greater direction to the tutors in their work. Today, Perach operates such that tutors are free to define both the content and specific goals of the tutoring activity to suit their perceptions of the children's needs. Only limited training and guidance are provided to them. The result is that the specific goals of the project are not clear and tutoring takes many different forms. In this context, it is important that tutors are made aware of the results of this study. Moreover, it must be made very clear to them the importance of transmitting to the tutored child not just the desire to achieve but also the tools necessary for this. This would mean that it should be stressed to the tutors that the major focus of the tutoring activity is to be on school achievement, basic skills, proper study habits and learning the contingency between effort and attainment. Although this may seem obvious, observation shows that many tutors downplay these aspects and tend to exaggerate etiquette, hygiene, social skills and enriching experiences. It would seem that if Perach aspires to affect changes in the children which are visible in the school context, priorities concerning tutoring activities must be set straight.

If, however, this is not Perach's primary aim, then formal goals need to be re-stated deemphasizing the academic side. In addition tutors, then, must be warned against raising the children's aspirations higher than their actual achievements warrent. In fact, one of the aims of the tutor might then be to assist the child in setting realistic goals for himself.

A Methodological Comment

Before concluding this report, an additional point should be made, namely, that the difficulty encountered in locating the children for the study may have had a strong bearing on the results. First of all, since children were sought through the schools, it seems that those not found would tend to be in less conventional academic situations. Secondly, one might expect from the start that those children from the most disadvantaged backgrounds would tend to occupy more marginal positions in the school system. Taken together this would mean that those children not located and from the lowest socioeconomic groups would be the most likely to either be enrolled in less academic frameworks or not studying at all. Thus, the fact that control

children from these groups were least often found is significant. This could mean that if it were possible to locate all of the children sought, then there is a greater likelihood that non-Perach children would have been found to be situated more often on the lower rungs of the educational ladder.[8] Such a difference would most likely have had a bearing on all further comparisons between the two groups, revealing Perach children in an even more favorable light. Moreover, from the information which has been obtained, the fact that Perach children from the lowest socioeconomic groups tended to be like both Perach and non-Perach children from the higher (relatively speaking) socioeconomic groups may testify to Perach's effect with these particular children.

Final Remarks

On the whole the results presented in this report are promising. It is clear, nevertheless, that further follow-up investigations must be conducted in order to reinforce and elaborate upon the information brought here. Studies must be carried out at regular intervals on different groups of tutored and comparable non-tutored children so that Perach's long-term impact is clearly discerned. In any future study it is extremely important to locate all of the children who are sought so that there are no doubts as to their place in the educational system. Today in the Central Administrative Office of Perach, unlike in the past, children's home addresses are kept on record which should facilitate any future follow-up investigation.

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[8] If this is the case, then the statistical manipulations used to control for socio-economic status were ineffective for they did not take into account the most marginal group.

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Appendix A. Research Instruments

Appendix A1: Follow-up Form

Child's research identification number: _____

Child's name	Identity card no.	Sex	Year of Birth
		F M	19___

School attended during 1977-78 school year: _____ Grade: _____

Research group in 1977-78: ☐ Experimental
☐ Control

Child's address: _____

School attended during 1979-80 school year: _____

Type of school:
1. Junior high school
2. Comprehensive high school
3. Academic (college-oriented) high school
4. Occupational high school
5. Agricultural high school
6. Boarding school
7. Other _____

Curriculum: _____

Is it possible for the child to take the matriculation examinations when studying in the above curriculum?

1. Yes
2. No

Child's academic standing (to be filled out in the school)

	Ability group			Grades on last report card						
	A	B	C	10	9	8	7	6	5	4
Hebrew										
Mathematics										
English										

Appendix A2: Pupil Questionnaire

Name: _____ School: _____ Grade: _____

1. Are you satisfied with your progress in school?

   a. Very satisfied
   b. Satisfied
   c. Dissatisfied
   d. Very dissatisfied

2. In which school subject do you succeed most? _____

3. Indicate with an X your academic standing in each one of the following school subjects:

	Excellent	Very Good	Good	Average	Poor	Very Poor
Mathematics						
English						
Hebrew						

4. Do you participate in class?

   a. Yes, very much
   b. Often
   c. Sometimes
   d. Not at all

5. Do you do your homework?

   a. Always
   b. Usually
   c. Sometimes
   d. Never

6. In general, how would you describe yourself as a student?

   a. Excellent
   b. Very good
   c. Good
   d. Poor
   e. Very poor

7. Place a X in the appropriate box.

	Agree	Disagree
a. I go to school because I like to meet my friends there.		
b. I go to school because I like to learn new things.		
c. I go to school because I have no choice; I am forced to go.		
d. I go to school because I have nothing else to do.		
e. I go to school because I know that my studies will help me get a job.		
f. I go to school because my friends go.		

8. How many books did you read in the past month (other than school books)?

a. More than 6
b. 4 - 6
c. 2 - 3
d. One
e. None

9. To what extent do you think about each of the following problems?

	I think a lot about this	I think somewhat about this	I don't think about this at all
Will I get good grades?			
Should I continue to study next year?			
Will I get a matriculation certificate?			
Which occupation should I choose when I'm older?			

10. To what extent do you feel you are liked by your classmates?

    a. I am among the 3 best liked pupils in class
    b. I am among the 7 best liked pupils in class
    c. I am among the 12 best liked pupils in class
    d. I am fairly well-liked by my classmates
    e. I am not well-liked by my classmates

11. Do you participate in social activities outside of school? (e.g., youth movement, youth center, clubs, etc.)

    a. Yes What?_____
    b. No

The following 3 questions are for high school students only. (If you are in Grades 7, 8 or 9 in junior high school, continue to question 15.)

12. In which study curriculum are you?

    a. I am studying _____
    b. There are no curriculums in our school.

13. Are you satisfied with your study curriculum?

    a. Yes
    b. No

14. Can you take the matriculation examinations from your curriculum?

    a. Yes, I can take all of the tests
    b. Yes, but only part
    c. No

15. Do you plan to continue in school next year?

    a. Yes, in the same school
    b. Yes, in another school
    c. No, I graduate this year
    d. No, I have other plans
    e. Don't know

16. Do you intend to take the matriculation examinations?

    a. Yes
    b. No
    c. I still don't know

17. If you take them, do you think you will pass them?

    a. Yes
    b. No

18. Do you intend to serve in the army when you finish school?

    a. Yes, why?_____
    b. No, why?_____

19. What occupation would you like to have when you are older?_____

20. Do you think that you will want to continue to study in order to acquire more knowledge and education after you finish high school?

    a. Yes
    b. No
    c. Maybe, I don't know yet

21. Did you have a Perach tutor in the past?

    a. Yes
    b. No
    c. I don't remember

    If yes, when?

Two years ago?	yes/no
Last year?	yes/no
This year?	yes/no

The following questions concern the tutor. Continue only if you had a Perach tutor in the past.

22. Do you remember your tutor's name?

    a. Yes _____
    b. No

23. Did you meet with your tutor after that particular school year ended?

    a. Yes
    b. No

24. Looking back, how would you evaluate the help given to you by the tutor?

    a. He helped me more than I had expected
    b. He helped me as much as I had expected
    c. He helped me less than I had expected

25. Do you feel that your tutor had helped you progress in your studies when you were meeting with him?

    a. Yes
    b. No

26. Did he help you with other things?

    a. Yes _____
    b. No

27. How would you describe the relationship you had with the tutor?

    a. Like with a school teacher
    b. Like with a good friend
    c. Like with a big brother

28. Did your meetings with the tutor prevent you from doing other things that you had wanted to do at the same time?

    a. They <u>often</u> prevented me from doing other things
    b. They <u>sometimes</u> prevented me from doing other things
    c. They did not interfere with other plans at all

29. How did your friends react at the time to the fact that you had a tutor?

    a. They made fun of me
    b. They were indifferent
    c. They were jealous

30. Assume that you have a younger brother. Would you tell him to ask for a tutor?

    a. Yes, why?_____
    b. No, why?_____

Appendix B. Additional Data

Appendix B1: Questionnaire Return Rate in % for Perach and Control Children by Sex and Grade Level

I. Boys

Grade level	Perach		Control	
	Returned	(Total n)	Returned	(Total n)
7	87%	(8)	100%	(3)
8	65%	(23)	87%	(8)
9	26%	(23)	33%	(12)
10	40%	(21)	40%	(15)
11	42%	(24)	53%	(19)

II. Girls

Grade level	Perach		Control	
	Returned	(Total n)	Returned	(Total n)
7	50%	(16)	83%	(6)
8	63%	(19)	50%	(8)
9	65%	(20)	53%	(15)
10	54%	(28)	52%	(23)
11	53%	(17)	33%	(15)

Appendix B2: Questionnaire Return Rate in % for Perach and Control Children by Socioeconomic Status

Socioeconomic Status	Perach		Control	
	Returned	(Total n)	Returned	(Total n)
Level I (lowest)	46%	(28)	40%	(5)
Level II	46%	(67)	50%	(32)
Level III	55%	(64)	50%	(52)
Level IV	73%	(11)	46%	(11)

Appendix B3: Sex Distribution of Perach and Control Children by Grade Level (%)

Grade level	Perach			Control		
	Boys	Girls	(n)	Boys	Girls	(n)
7	33	67	(24)	33	67	(9)
8	55	45	(42)	50	50	(16)
9	53	47	(43)	44	56	(27)
10	43	57	(49)	39	61	(38)
11	59	41	(41)	56	44	(34)

Appendix B4: Average Socioeconomic Scores for Perach and Control Children by Grade Level

Grade level	Perach		Control	
	$\bar{X}$	(n)	$\bar{X}$	(n)
7	2.67	(18)	2.78	(9)
8	2.33	(33)	2.71	(14)
9	2.18	(40)	2.50	(24)
10	2.51	(45)	2.55	(27)
11	2.17	(30)	2.96	(26)

Appendix B5: Distribution of Perach (P) and Control (C) Children by Socioeconomic Status (SES) and Type of High School (%)

Type of school	(low SES) 1		2		3		4*	
	P	C	P	C	P	C	P	C
Comprehensive	32	75	23	28	44	24	23	37
Academic	4.5	-	4	-	2	14	9	7
Occupational	54.5	25	51	48	37	46	55	33
Boarding	4.5	-	6	8	7	5	14	-
Other	4.5	-	9	12	2	3	-	3
Work	-	-	6	4	7	8	-	20
Total n	22	4	47	25	43	37	22	30

* Difference significant at $p \leq .05$

Appendix B6: Distribution of Perach (P) and Control (C) Children by Grade Level and Type of High School (%)

Type of School	Grade 7		Grade 8		Grade 9	
	P	C	P	C	P	C
Comprehensive	50	38	33	33	12	20
Academic	8	12	2	9	3	4
Occupational	38	41	47	41	64	48
Boarding	2	-	9	9	3	4
Other	2	9	9	9	-	12
Work	-	-	-	-	18	12
Total n	40	24	43	24	33	25

Appendix B7: Distribution of Perach (P) and Control (C) Children by Socioeconomic Status (SES) and Level of Curriculum (Raw Numbers) - Grades 10 & 11

	(lowest SES) 1		2		3		4	
Curriculum level	P	C	P	C	P	C	P	C
Practical	-	-	2	4	2	3	1	-
Regular	8	1	10	7	15	9	7	10
Theoretical	6	-	8	3	7	7	7	7
Academic	1	1	1	1	3	3	2	1
Total n	15	2	21	15	27	22	17	18

Appendix B8: Distribution of Perach (P) and Control (C) Children by Sex and Level of Curriculum, Grades 10 & 11 (%)

	Boys		Girls*	
Curriculum level	P	C	P	C
Practical	8	17	5	9
Regular	54	42	46	52
Theoretical	28	33	42	27
Academic	10	8	7	12
Total n	39	24	41	33

* Difference between groups significant at $p < .10$ for χ^2.

Appendix B9: Average Pre-, Post- and Follow-up Scores for Perach (P) and Control (C) Children by Grade Level on Aspirations, School Self-Concept and Perceptions of Popularity

($\bar{X}$)
(sd)
(n)

Grade		Aspirations			School Self-Concept			Popularity**		
		Pre	Post	Follow-up	Pre	Post	Follow-up	Pre	Post	Follow-up
7	P	11.20	11.00	9.00	17.82*	18.82	16.82	2.80	2.47	3.67
		1.30	1.58	3.81	2.36	2.71	4.54	1.61	1.41	.98
		(5)			(11)			(15)		
	C	11.67	11.67	9.00	22.00	19.00	16.00	3.29	3.29	3.00
		1.16	1.16	3.46	3.16	3.56	4.76	1.60	1.60	1.29
		(3)			(4)			(7)		
8	P	10.86	10.14	9.93	20.47	20.65*	17.53	3.46	3.00	2.96
		1.51	2.38	3.34	3.94	3.55	3.68	1.21	1.23	1.22
		(14)			(17)			(26)		
	C	9.75	10.00	10.25	18.11	18.00	18.78	2.87	3.00	2.88
		2.50	1.16	1.50	3.22	2.50	3.07	1.25	1.51	1.36
		(4)			(9)			(8)		
9	P	9.67	10.33	9.83*	19.31	19.23	18.69	2.94	3.41	3.41
		3.02	2.71	2.59	2.66	3.29	3.79	1.44	1.28	1.18
		(12)			(13)			(17)		
	C	10.75	10.88	7.00	19.30	19.90	18.50	2.73	2.64	3.27
		1.91	2.85	3.16	3.16	2.38	2.51	1.49	1.43	1.10
		(8)			(10)			(11)		

Appendix B9 (Contd.)

Grade		Aspirations			School Self-Concept			Popularity**		
		Pre	Post	Follow-up	Pre	Post	Follow-up	Pre	Post	Follow-up
10	P	10.00 2.24 (9)	9.44 2.74	10.11* 2.42	17.13 2.92 (15)	17.40 2.67	18.07 3.28	2.88 1.36 (17)	2.65 1.11	2.71 1.05
	C	7.57 2.70 (7)	9.14 2.41	7.29 2.63	17.25 2.91 (8)	18.25 3.06	16.25 1.98	2.56 1.24 (9)	2.89 1.36	3.00 1.22
11	P	9.43 1.72 (7)	10.29 1.25	8.57 2.70	15.86 1.46 (7)	16.29 1.11	17.00 2.45	3.18 1.33 (11)	3.45 1.29	3.09 .83
	C	9.83 1.84 (6)	10.67 .82	8.17 2.71	16.86 2.41 (7)	17.14 2.27	17.14 2.41	3.00 1.32 (9)	3.11 1.45	2.89 1.17

* Significant difference between Perach and Control, $p \leq .05$ using t-test.

** Inverse scale, i.e., high score indicates little feeling of being well-liked.

Appendix B10: Average Follow-up Scores for Perach (P) and Control (C) Children by Grade Level on Aspiration, School Self-Concept and Perception of Popularity, controlling for pre-scores and socioeconomic status

$\left(\frac{\bar{X}}{n}\right)$

	Aspirations		School Self-Concept		Popularity**	
	Perach	Control	Perach	Control	Perach	Control
Total Population	9.52*	7.99	17.83	17.46	3.09	3.00
	(50)	(28)	(73)	(39)	(91)	(45)
Grade						
7	8.73	9.20	17.99	14.03	3.51	2.93
	(3)	(4)	(10)	(5)	(13)	(8)
8	9.53	10.87	17.49	18.27	2.88	2.95
	(12)	(3)	(16)	(8)	(21)	(8)
9	9.62*	6.60	19.01	17.60	3.06	3.66
	(12)	(6)	(15)	(8)	(18)	(9)
10	10.10*	8.10	17.68	16.69	2.93	2.78
	(11)	(8)	(19)	(9)	(21)	(9)
11	8.34	8.42	17.15	19.01	3.02	3.05
	(12)	(7)	(13)	(9)	(18)	(11)

* Significant difference between P and C using analysis of covariance, $p \leq .05$

** Inverse scale, i.e., high score indicates little feeling of being well-liked.

Appendix B11: Distribution by Grade Level of Perach and Control Children on Plans to Continue to Post-Secondary Studies (%)

Question: Do you plan to continue studying after you complete high school?

Grade		Perach	Control
5	yes	62	50
	maybe	38	38
	no	-	12
	(n)	(16)	(8)
6	yes	46	45
	maybe	46	55
	no	8	-
	(n)	(28)	(11)
7*	yes	65	27
	maybe	30	73
	no	5	-
	(n)	(20)	(11)
8	yes	48	28
	maybe	48	55
	no	4	17
	(n)	(23)	(18)
9*	yes	62	29
	maybe	33	59
	no	5	12
	(n)	(21)	(17)

* $p \leq .10$ for χ^2

Appendix B12: Distribution by Socioeconomic Status of Perach and Control Children on Post-Secondary School Plans (%)

Question: Do you plan to continue studying after you complete high school?

SES		Perach	Control
Low	yes	43	100
	maybe	43	-
	no	14	-
	(n)	(14)	(2)
Med-Low	yes	56	40
	maybe	41	60
	no	3	-
	(n)	(32)	(15)
Med-High*	yes	67	29
	maybe	30	57
	no	3	14
	(n)	(37)	(28)
High	yes	44	30
	maybe	52	60
	no	4	10
	(n)	(25)	(20)

* $p \leq .005$ for χ^2

Appendix B13: Average Scores on Satisfaction in School* for Perach (P) and Control (C) Children

		Satisfaction in School		
		P	C	n
Grade	7	1.93	2.25	23
	8	1.89	1.45	38
	9	2.05	1.75	31
	10	1.87	2.17	41
	11	2.00	2.20	34

* Inverse scale, i.e., a lower average score indicates higher satisfaction.